IN THE CLAIMS

Please cancel Claims 1, 4 and 7 without prejudice, amend Claims 2, 3, 5, and 8, and add

5   new Claims 9-34 follows:

1. (Cancelled)

2. (Currently amended) A machine readable medium ~~containing~~ comprising a data
structure for arbitrating on a high performance serial bus, said data structure adapted to be stored
in a computer memory and comprising a symbol generated by a border node ~~having~~ comprising

10   an indication therein for indicating that a PHY or link layer from a Legacy cloud wishes to
arbitrate within a beta cloud.

3. (Currently amended)   A machine readable data transmission ~~containing~~ comprising a
data structure for arbitrating on a high performance serial bus, said data structure adapted to
being stored in a computer memory, comprising a symbol generated by a border node ~~having~~

15   comprising an indication therein for indicating that a device or link from a Legacy cloud wishes
to arbitrate within a beta cloud.

4. (Cancelled)

5. (Currently amended) In a full-duplex communications system ~~having~~ comprising a
plurality of border nodes within a beta cloud, a method for issuing gap tokens within a beta cloud

20   comprising:
        ~~ensuring that one of the plurality of border devices is selecting as the BOSS node before~~
        ~~an extended period of IDLE time appears on the bus.~~
        selecting one border device among said plurality of border devices to be a BOSS node;
        detecting a period of idle bus activity; and

25   having said BOSS node generate a gap token upon said detection of said period of idle
bus activity.

6. (Original) In a full-duplex communications system having a plurality of border nodes
within a beta cloud, and one of the border nodes being a senior border node, a method for issuing
gap tokens within a beta cloud comprising giving responsibility for issuing gap tokens in the beta

30   cloud to the senior border node.

7. (Cancelled)

8. (Currently amended) In a hybrid communications system ~~having a plurality of ports and~~ comprising a plurality of nodes with at least one beta ~~device~~ node ~~having~~ comprising a senior port and at least one junior port[[s]], each node in said plurality of nodes comprising a port; a method for returning control to a senior border node comprising:

5   determining by the beta ~~device~~ node whether an end of subaction has been reached;

~~sending~~ having said beta node send a DATA_END ~~to all ports~~ out of said beta node's senior port and out of each of said beta node's junior ports if an end of subaction has not been reached;

if a subaction has been reached, further determining by said beta ~~device~~ node whether

10   there are any in-phase requests to grant from a requesting port, wherein said requesting port is a port from a node in said plurality of nodes other than said beta node;

if there are any in-phase requests, sending by said beta ~~device~~ node a GRANT to said requesting port, and sending a DATA_NULL to all other ports of nodes other than said beta node;

15   if there are no in-phase requests; further determining by said beta ~~device~~ node whether said beta ~~device~~ node is a senior border ~~device~~ node;

having ~~sending by~~ said beta ~~device~~ node send a DATA_END ~~out all said beta device's ports~~ out of said beta node's senior port and out of each of said beta node's junior ports if said beta ~~device~~ node is a senior border node; and

20   sending a GRANT ~~symbol~~ out of said beta ~~device's~~ node's senior port[[,]] and sending a DATA_END out of each of said beta ~~device's~~ node's junior ports if said beta ~~device~~ node is not a senior border node.

9. (New) The machine readable medium of Claim 2, wherein said symbol comprises a legacy request symbol.

25   10. (New) The machine readable medium of Claim 9, wherein said legacy request symbol comprises a priority.

11. (New) The machine readable medium of Claim 10, wherein said priority is higher than that of any asynchronous and isochronous requests present on said beta cloud.

12. (New) The machine readable medium of Claim 3, wherein said symbol comprises a

30   legacy request symbol.

13. (New) The machine readable medium of Claim 12, wherein said legacy request symbol comprises a priority.

14. (New) The machine readable medium of Claim 13, wherein said priority is higher than of any asynchronous and isochronous requests present on said beta cloud.

15. (New) In a communication system having a plurality of nodes and having at least one hybrid bus comprising a first serialized protocol and a second serialized protocol, a method for issuing a inactivity-related communication to one of said plurality of nodes, said method comprising:

timing a period of idle bus activity in at least a portion of said hybrid bus operating according to said first serialized protocol;

generating an inactivity-related communication corresponding to said period of idle bus activity, and

transferring said gap-related communication to said one node.

16. (New) The method of Claim 15, wherein said first serialized protocol comprises an IEEE-1394a compliant protocol, and said second protocol comprises an IEEE-1394b compliant protocol, and said one node comprises a border node.

17. (New) The method of Claim 16, wherein said act of generating is performed by a senior border node within said system.

18. (New) The method of Claim 15, wherein said inactivity related communication comprises a gap token.

19. (New) A control method for use by a beta node of a hybrid communication system comprising a plurality of nodes, each of said nodes comprising a port, said beta node comprising a senior port and at least one junior port, wherein said control method comprises:

issuing a first signal from said beta node's senior port and each of said beta node's junior ports if an end of a subaction has not been reached;

if an end of a subaction has been reached, determining whether a port of any node other than said beta node has issued an in-phase request; and

if an in-phase request has issued from said port of any other node, sending a second signal to said issuing port, and sending a third signal to all other ports;

if there are no in-phase requests, determining whether said beta node is a senior border node;

sending said first signal out of said beta node's senior port and out of each of said beta node's junior ports if said beta node is a senior border node; and

sending said second signal out of said beta node's senior port and sending a said first signal out of each of said beta nodes junior ports if said beta node is not a senior border node.

5   20. (New) A method for use by a senior border node of a hybrid communication system comprising a plurality of nodes, each of said nodes comprising a port, said senior border node comprising a senior port and at least one junior port, wherein said method comprises:

issuing a first signal from said senior border node's senior port and each of said senior border node's junior ports if an end of a subaction has not been reached;

10   if an end of a subaction has been reached, determining whether a port of any node other than said senior border node has communicated an in-phase request; and

if there are no in-phase requests, sending a first signal out of said senior border node's senior port and out of each of said senior node's junior ports.

21. (New) In a hybrid communications system having a plurality of nodes including a

15   senior border node, and at least one device having at least one senior port and at least one and junior port, a method for returning control to said senior border node comprising:

identifying an end of an asynchronous action condition, said condition further comprising a condition where no in-phase arbitration requests are pending; and

determining whether said device is a senior border node and if so, sending a first signal

20   out all of said device's senior and junior ports, and if not:

sending a second signal out of said device's at least one senior port; and

sending said first signal out of said device's at least one junior port.

22. (New) The method of Claim 21, wherein said second signal comprises a signal indicating control is to be granted to a node communicating with said at least one senior port, and

25   said first signal comprises a signal indicating that control is not to be granted to a node communicating with said at least one junior port.

23. (New) The method of Claim 21, wherein said device comprises a beta device.

24. (New) The method of Claim 22, wherein said hybrid system comprises a hybrid IEEE-1394a/IEEE 1394b system.

30   25. (New)   A machine readable medium comprising a data structure for arbitrating on a high performance serial bus, said serial bus comprising first and second serialized protocols,

said data structure adapted to be stored in a computer memory and comprising at least one communication generated by a border node comprising an indication therein for indicating that a physical layer or link layer from a network cluster operating according to said first protocol wishes to arbitrate within a cluster operating according to said second protocol.

26. (New) The machine readable medium of Claim 25, wherein said first protocol comprises the IEEE-1394a protocol, and said second protocol comprises the IEEE-1394b protocol.

27. (New) The machine readable medium of Claim 25, wherein said at least one communication comprises a legacy request symbol.

28. (New) The machine readable medium of Claim 27, wherein said legacy request symbol comprises a priority.

29. (New) The machine readable medium of Claim 28, wherein said priority is higher than that of any asynchronous and isochronous requests present on said network cluster operating according to said second protocol.

30. (New) A machine readable data transmission comprising a data structure for arbitrating on a high performance serial bus, said data structure adapted to being stored in a computer memory, comprising at least one communication generated by a border node comprising an indication therein for indicating that a device or link from a network cluster operating according to said first protocol wishes to arbitrate within a network cluster operating according to said second protocol.

31. (New) The machine readable medium of Claim 30, wherein said first protocol comprises the IEEE-1394a protocol, and said second protocol comprises the IEEE-1394b protocol.

32. (New) The machine readable medium of Claim 30, wherein said at least one communication comprises a legacy request symbol.

33. (New) The machine readable medium of Claim 32, wherein said legacy request symbol comprises a priority.

34. (New) The machine readable medium of Claim 33, wherein said priority is higher than that of any asynchronous and isochronous requests present on said network cluster operating according to said second protocol.